

WHAT IS CLAIMED IS:

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1. A method for protecting a semiconductor device, comprising the step of:  
attaching a protection member detachably to the semiconductor device that includes one or  
10 more elements.

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2. A method for protecting a semiconductor device that is subjected to a plurality of treatments after fabrication but before shipment, comprising the step of:  
performing the treatments with a  
20 protection member being attached to the semiconductor device.

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3. The method as claimed in claim 2,  
wherein  
the treatments include transportation of the semiconductor device with the semiconductor  
30 device being held by a suction chuck through a suction hole formed on the protection member.

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4. A method for testing a semiconductor device, comprising the step of:

attaching a semiconductor device  
protection cover detachably to the semiconductor  
device; and

5 pressing the semiconductor device against  
an IC contactor with the semiconductor device  
protection cover therebetween for a test.

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5. A semiconductor device protection  
cover attached to a semiconductor device,  
comprising:

a base portion;

15 a first surface, said first surface being  
flat; and

a second surface having a projecting  
portion to be brought into contact with a substrate  
of the semiconductor device and a depressed portion  
20 not to be brought into contact with parts mounted in  
the semiconductor device.

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6. The semiconductor device protection  
cover as claimed in claim 5, wherein

the semiconductor device protection cover  
has a structure able to be detachably attached to  
30 the semiconductor device.

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7. The semiconductor device protection  
cover as claimed in claim 5, wherein  
the projecting portion and the base

portion of the semiconductor device protection cover are formed from materials having hardness higher than a surface of the semiconductor device.

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8. The semiconductor device protection cover as claimed in claim 5, wherein

10           the projecting portion and the base portion of the semiconductor device protection cover are formed from materials having hardness lower than a surface of the semiconductor device.

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9. The semiconductor device protection cover as claimed in claim 5, wherein

20           the projecting portion and the base portion of the semiconductor device protection cover are formed from elastic materials.

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10. The semiconductor device protection cover as claimed in claim 5, wherein

              the projecting portion and the base  
30 portion of the semiconductor device protection cover have conductivity.

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11. The semiconductor device protection cover as claimed in claim 6, further comprising an

engaging portion that engages the semiconductor device protection cover with the semiconductor device with the semiconductor device protection cover being attached to the semiconductor device.

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12. The semiconductor device protection cover as claimed in claim 6, wherein the base portion has a predetermined shape irrespective of an outer shape of the semiconductor device.

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13. A semiconductor device protection cover attached to a semiconductor device, comprising:

20           a base portion;  
            a first surface, said first surface being flat; and  
            a second surface to be brought into contact with a substrate of and parts mounted in the semiconductor device, said second surface being  
25           formed from an elastic material.

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14. A semiconductor device unit, comprising:

            a semiconductor device; and  
            a semiconductor device protection cover,  
35           wherein  
            the semiconductor device protection cover comprises:

a base portion;  
a first surface, said first surface being  
flat; and

5 a second surface having a projecting  
portion to be brought into contact with a substrate  
of the semiconductor device and a depressed portion  
not to be brought into contact with parts mounted in  
the semiconductor device.

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15. The semiconductor device unit as  
claimed in claim 14, wherein

15 the semiconductor device has a first  
positioning member; and

the semiconductor device protection cover  
has a second positioning member, the semiconductor  
device and the semiconductor device protection cover  
20 being set in position when the first positioning  
member and the second positioning member are engaged  
with each other.

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16. The semiconductor device unit as  
claimed in claim 15, wherein

30 the first positioning member is a  
projection; and

the second positioning member is a recess  
engagable with the projection.

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17. The semiconductor device unit as claimed in claim 16, wherein an inclined surface is formed on the projection for guiding insertion of the projection into the recess.

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18. The semiconductor device unit as claimed in claim 15, wherein  
the first positioning member is a peripheral part of the semiconductor device; and  
the second positioning member is a wall engagable with the peripheral part.

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19. The semiconductor device unit as claimed in claim 18, wherein  
an inclined surface is formed on the second positioning member for guiding the first positioning member to engage with the second positioning member.

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20. The semiconductor device unit as claimed in claim 15, wherein  
the first positioning member and the second positioning member are formed by recognition marks.

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21. A semiconductor device packaging structure for packaging a semiconductor device, comprising:

5 a tray including a first semi-tray and a second semi-tray, the semiconductor device being attached to and packaged in the tray; and

a semiconductor device protection cover arranged between the first semi-tray and a surface of the semiconductor device,

10 wherein

the semiconductor device protection cover comprises:

a base portion;

15 a first surface, said first surface being flat; and

a second surface having a projecting portion to be brought into contact with a substrate of the semiconductor device and a depressed portion not to be brought into contact with parts mounted in  
20 the semiconductor device.

25 22. A semiconductor device package structure for packaging a semiconductor device, comprising:

an embossed tape on which the semiconductor device is pasted; and

30 a semiconductor device protection cover arranged on a surface of the semiconductor device,

wherein

the semiconductor device protection cover comprises:

35 a base portion;

a first surface, said first surface being flat; and

a second surface having a projecting portion to be brought into contact with a substrate of the semiconductor device and a depressed portion not to be brought into contact with parts mounted in

5 the semiconductor device.